EB-2019-0082

IN THE MATTER OF *the Ontario Energy Board Act, 1998* ("Act");

AND IN THE MATTER OF an Application by Hydro One Networks Inc. for an order or orders made pursuant to section 78 of the Act approving rates for the transmission of electricity.

Energy Probe Research Foundation

Interrogatories to Hydro One Transmission

July 2, 2019

A-EP-1
Reference: Exhibit A, Tab 3, Schedule 1, Page 3
Preamble: Hydro One's plan will address critical safety and environmental risks in its system. It will improve reliability performance by 13% to return to the top quartile performance that Hydro One's transmission customers are expecting

Question:
Please provide a listing of all the Exhibits and page numbers that contain evidence on HOTX System Reliability

A-EP-2
References: Exhibit A, Tab 3, Schedule 1, Pages 26 and 27, Tables 5 and 6; Exhibit A,Tab 3, Schedule 1, Pages 47 and 48, Tables 14 and 15
Preamble: Approximately 3.8% of the average increase to transmission rates in 2020 resulting from the Application is driven by a reduction to Hydro One's load forecast relative the forecast currently underpinning rates, which is driven by factors that are beyond Hydro One's control as explained in Section 6.3 of this Exhibit.

Question:
a) Please provide a summary table that shows for 2011-2018, the forecast and actual load.

b) Please provide a quantitative discussion of the main drivers for historic reductions in load.

c) For 2019-2024 please discuss in quantitative terms the basis for the 3.8% forecast load reduction and reasons for changes in Ontario demand.

d) With regard to the Load Forecast Model, please provide details of latest sectoral forecast and graphical presentation(s), plus showing errors/trends, plus a discussion on statistical error associated with the model.

e) Discuss if there are structural changes or other factors resulting in forecast error.

A-EP-3
References: Exhibit A, Tab 3, Schedule 1, Page 16, Overview 2019-2024 TX Investment Plan; Exhibit A, Tab 3, Schedule 1, Attachment 1; Exhibit A, Tab 7, Schedule 1 Attachment 1 Appendix 2AC.
Preamble: Energy Probe has read the high level Corporate Objectives. We wish to understand why improving System Reliability is not the major priority for the 2019-2024 Investment Plan. We have also reviewed the Evolved TX Scorecard.

Question:
a) Why is Hydro One still a worse performer for Reliability (T-SAIDI, T-SAIFI, T-MAIFI) than many of its peers, when weather and other external codes are taken into account?

b) Given the clear Customer Preferences summarized in References 2 and 3 above, please explain why System Reliability is not the number one Corporate priority after Safety.

c) Please provide graphical representations of the historic and forecast T-SAIDI , T-SAIFI, T-MAIFI data shown in the Evolved Transmission Scorecard

A-EP-4

Reference: Exhibit A, Tab 4, Schedule 1, Attachment 1-PSE Report Pages 18/19 and Page 37 Preamble*:* However, it is likely that this output growth term will be very close to zero in the CIR period (see Table 8). The flat or declining nature of peak demands, due to conservation and demand management (CDM) plans and energy efficiency technology gains, makes it very likely that the maximum peak demand will be flat. Further, the total kilometres (KM) of transmission lines are projected by Hydro One to remain very close to current levels. Thus, the output growth rate will be essentially zero for each year of the CIR period.

Question:

a) Did Hydro One Provide a Peak demand forecast for the CIR period to PSE? If so please provide a copy.

b) Why does PSE use the assumption that peak demand growth (MW) will be flat given the negative load forecast (MWh), or will the System Load Factor change with load?

c) If the growth factor is negative what will be the impact on the CIR Formula and Revenue Requirement in 2021 and 2022?

d) Please provide a sensitivity analysis that shows this based on Hydro One Transmission peak demand data.

A-EP-5

Reference: Exhibit A, Tab 3, Schedule 1, Page 39, and Appendix page 20 -Evolved Electricity Transmitter Scorecard Measures; Exhibit B Section 1.5 TSP Page 5

Question:

a) Please provide the weightings for each of the 4 Major Categories in the Evolved Scorecard.

b) Please explain/support the forecasts for System Reliability in the Evolved T Scorecard.

c) Please provide graphical representation of the 10 year historic and forecast Reliability measures (T-SAIDI, T-SAIFI and T-MAIFI).

d) Please provide in chart form the cause codes related to 2018 system reliability. Compare to the 5 year averages 2014-2017 and discuss reasons why/if 2018 is different

e) Please provide any internal reports related to the worsening of Reliability measures in 2018, including system availability and unsupplied load.

f) Please provide a list of where the delivery point "trouble spots" are located, the number of distributors (including Hydro One) and number of customers affected.

g) Please point to the evidence that describes and discusses the remedial actions Hydro One Transmission is taking to address the issues and provide a short synopsis.

h) Are the forecast 2019-2024 Reliability values targets and if so, what turns on achieving these? If not, explain why not.

A-EP-6
Reference: Exhibit A, Tab 3, Schedule 1 Table 2: Productivity Savings Forecast Summary

Question:

a) Please provide a Table showing the 2018 Baseline costs and the Productivity Saving Forecast.

b) Please explain in more detail the Capital savings in context of the 2019-2024 Capital Plan.

A-EP-7
Reference: Exhibit A, Tab 3, Schedule 1, Page 25
Preamble: In developing its Investment Plan, Hydro One utilized the Ontario Consumer Price Index ("CPI") for its assumptions about inflation. A CPI of 2% was assumed over the planning period. The Global Insight exchange rate forecast was used for other variables such as fleet vehicle related costs, which are typically obtained in US dollars. The exchange rate was forecast to range between 0.793 and 0.803 over the planning period.

Question:

a) Please explain why for forecasting its costs, Hydro One uses CPI instead of GDP-IPI (FDD) as per the RCI formula?

b) Please provide the breakdown of Capital and O&M RR costs into those subject to the CPI and those part of IPI FDD.

A-EP-8
References: Exhibit A, Tab 3 Schedule 1, Page 43, Table 10 ; Exhibit F, Tab 4 Schedule 1, Attachment 5
Preamble: Hydro One's 2019 and 2020 total transmission-allocated compensation costs are summarized in Table 10. The 2020 transmission-allocated costs represent an 8.0% increase over 2019 levels.

Question:

a) Please break down the Compensation Increase relative to 2018 into % associated each of with Headcount, negotiated wage increases for each of Executive Management and Union and Incentive pay.

b) Please provide/compare the compensation amount claimed for HO Distribution.

c) Please explain any differences related to staffing profiles and why this level of increase is appropriate.

A-EP-9
Reference: Exhibit A, Tab 4, Schedule 1, Page 6, Table 2
Preamble: The Custom Capital Factor is the percentage change in the Total Revenue Requirement (line 11 of Table 1) attributable to new capital investment that is not otherwise recovered from customers. This includes depreciation, return on equity, interest and taxes attributable to new capital investment placed in-service each year of the Custom IR term. The Capital Related Revenue Requirement (line 6) each year is based on the change in rate base.

Question:

a) Please provide for illustrative purposes, the rate base and proxy Capital Factor for the Historic and 2019 years. Please add explanatory notes.

b) Please discuss why the Capital Factor should be based on the prior year closing Rate Base as opposed to Net Assets in Service or some other parameter.

c) When has the Board approved a similar Capital Factor for either distribution or transmission?

d) Discuss why the revenue requirement associated with the Capital Factor should not be based on the actual in-service capital additions.

B-EP-10
Reference: Exhibit B, Tab1, Schedule 1, TSP Section 1.5, Pages 29-30, Figures 6,7 and 8

Question:

a) Please position Hydro One relative to the top quartile of the Transmission peer group T-SAIDI T- SAIFI and T-MAIFI in terms of number of customers interrupted and duration in last data year (2016) and provide 2018 actuals relative to the top quartile of the Transmission peer group.

b) Please provide the 2019-2024 targets for system reliability by adding bar charts to the referenced Figures 6, 7, 8.

c) Please provide the 2019-2024 targets for delivery point system unavailability and unsupplied load by adding bar charts to the referenced Figures 9 and 10
Ensure the projections are consistent with the Evolved Transmission Scorecard.

B-EP-11
Reference: Exhibit B1, Tab 1, Schedule 1, TSP Section 1.8 Line losses; Exhibit I1 Tab 1, Schedule 3

Question:

a) Please provide Hydro One Transmission historical and forecast line losses.

b) What are the main drivers factors affecting line losses from Hydro One existing assets e.g. voltage, km of lines, climate etc.?

c) Please provide data showing how Hydro One's line losses compare to other large North American transmitters, including Canadian transmitters.

d) How does the Transmission Cost Allocation Model allocate line losses to Functions and Pools? Please provide details including the cost allocation factors.

e) Provide an example for 2020 showing how line losses are allocated to Network, Line, Transformation and Export.

f) Please provide a breakdown of line kilometers for Network and Line.

g) Please provide Export Line kilometers and Generation Line kilometers as subsets.

h) Comment if a more detailed breakdown of line kilometers could result in a more appropriate allocation of costs related to line Losses

B-EP-12
Reference: Exhibit B, Tab 1, Schedule 1, TSP Section 1.5, Page 16, Table 6; Exhibit B-1-1 TSP Section 1.5, Pages 45-47, Figures 17 and 18
Preamble: In 2018, Hydro One Transmission line clearing and brush control activities accounted for approximately 78 per cent of the overall transmission forestry budget. The unit cost measures are calculated by dividing the annual expenditure on a given program by the number of units completed in that year.

Question:

a) Please provide a projection of unit costs for 2019-2024 by adding bars to the referenced figures. Please ensure consistency with Evolved Transmission Scorecard.

b) Please provide a chart showing the annual cycle times for brush control and line clearing for the historic period showing if/when the cycles were changed.

c) Are the cycle times now consistent with the recommendations of the CNUC Benchmarking Study filed in the prior case (EB-2014-0160)?

d) How do the cycle times compare to those accepted by the Regie for Hydro Quebec? (CNUC Survey 2016 HQD Doc 1; Decision R-4011-2017)

C-EP-13
Reference: Exhibit C, Tab 2, Schedule 1, Page 13

Question:
Does Hydro One have a prioritization system for capital projects? If the answer is yes, please explain how it was used for the allocation of capital reductions in the DRO process. If the answer is no, please explain why not.

C-EP-14
Reference: Exhibit C, Tab 2, Attachment 2, Page 48
Preamble: The explanation for the variance in the Inter Area Network Transfer Capability mentions that "project risks did not materialize" in the Clarington TS project.

Question:
Did the Clarington TS project cost estimate include contingency? If the answer is yes, please provide a table that shows the contingency for the DRO and the Actuals. If the answer is no, please explain why not.

F-EP-15
Reference: Exhibit F, Tab 1, Schedule 6, Tables 1 and 2, Page 2

Question:
Please explain why Actual Customer Care costs were higher than Plan for 2017 and 2018 while Corporate Affairs and Outsourcing Actual costs were lower than Plan for those years.

F-EP-16
Reference: Exhibit F, Tab 1, Schedule 7, Page 8; EB-2016-0160 Exhibit B2, Tab 2, Schedule 1

Preamble: In EB-2016-0160 Hydro One indicated that although the hourly cost of overtime, which is driven by negotiated labour contracts, was higher than the peer group (Figure 30), Hydro One's overtime usage, as a percent of total hours, was consistent with other companies in the peer group (Figure 31). However, under the existing labour agreements, it also means that additional hours begin at double-time pay, rather than time and a half. Overtime cost for Hydro One was generally higher than the other reporting companies. Significant benefit can be realised by minimising overtime. (Page 30 of Report).

Question:

a) Please indicate the basis of the current overtime policy.

b) Please provide the data showing base year overtime paid relative to the peer group (include explanations for normalizing data).

c) Please indicate the average overtime in 2018 as a percentage of base pay for Union, Society and MCP employees.

d) Please provide the calculation of total overtime paid in 2018 and provide an alternative cost with time and half (except for statutory holidays).

F-EP-17

References: Exhibit F, Tab 2, Schedule 6, B&V Cost Allocation Study Page 18;
Exhibit F, Tab 2, Schedule 1, Attachment 1, Appendix 2-N, Shared Services and Corporate Cost Allocation

Question:

a) Please provide a summary of the 2020 costs and allocation for
   i. Office of the CEO
   ii. Board of Directors
   iii. Corporate Secretary
   iv. Other Governance costs

b) For the following functions please provide a summary of the costs and the allocation of these for 2020:

   i. <u>Ombudsman Office</u>
   The Ombudsman Office commenced activity following the Initial Public Offering, in order to address complaints escalated from the Customer Service. Prior to that, the Province of Ontario's Ombudsman had authority to investigate issues related to Hydro One customers.

   ii. <u>Investor Relations</u>
   Investor Relations commenced activity following the Initial Public Offering, in order to communicate with Shareholders and potential investors and address their concerns.

c) Please confirm that the costs of EVP Strategy Office (Corporate Development) are directly assigned to the shareholder only.

F-EP-18
References: Exhibit F, Tab 4, Schedule 1, Page 13, Table 2; Exhibit F, Tab 4, Schedule1, Attachment 5

Question:

a) Please confirm the following: relative to 2018, by 2022 Hydro One has/will hire an additional ~ 500 regular employees and will add in total 800 employees.

b) Please provide OEB Form 2K for both historic years and projection to 2022.

c) Using the Exhibit in the second reference, please compute the % increases in the Headcount and Total Compensation from 2018-2022 and map these to each of Distribution and Transmission.

F-EP-19
Reference: Exhibit F, Tab 4, Schedule 1, Page 40, Figure 7 and Table 9
Preamble: In summary, Hydro One has been successful in reducing pension costs, including by:

- making incremental increases in employee pension contributions for all employee groups;
- improving the ratio of employer and employee cost sharing by moving towards the 50%-50% cost sharing ratio;
- closing the Defined Benefit Pension for new Management employees and introducing a lower cost Defined Contribution Plan; and
- changing the early undiscounted pension thresholds for PWU and Legacy Society employees starting in 2025.

Question:

a) Please confirm the following from the evidence and Figure 7 and add explanatory notes
   i. For the PWU employee pension contributions (YMPE) have increased to 11.3%.
   ii. The Service Cost Ratio has decreased to 1.5
   iii. The Target service Cost Ratio Target is 1.0 (50:50)

b) Please Indicate how much of the employer saving shown in Table 9 is attributed to Distribution and Transmission.

c) Has Hydro One benchmarked its PWU pension costs to its peer group? Please provide a copy of the latest studies.

F-EP-20
Reference: Exhibit F Tab 4 Schedule 1 Pages 42- 47 Appendix A, Figures A1-A6

Question:

a) Please confirm the following and add explanatory notes

For the Society

- Employee pension contributions (YMPE) have increased to 11.3% (legacy) and 10.8% (post 2005 hires).
- The Service Cost Ratio has decreased to 1.7 (Legacy) and 1.0- 1.1 (Post 2005 hires)
- The Target service Cost Ratio Target is 1.0 (50:50)

For MCP

- Employee Pension contributions (YMPE) have increased to 11.3% (Pre 2004)) and 10.8% (post 2004 hires).
- The Service Cost Ratio has decreased to 1.7(Pre 2004) and 1.0- 1.1 (Post 2004 hires)
- The Target service Cost Ratio Target is 1.0 (50:50)

b) Please provide a table similar to Table 9 showing Employer Savings and the allocations to Distribution and Transmission.

c) Has Hydro One benchmarked its Society and MCP pension costs to its Peer Group? Please provide a copy of the latest studies.

F-EP-21
References: Exhibit F, Tab 4, Schedule 1, Table 8, and Table B1; Exhibit F, Tab 4, Schedule 1 Attachment 2, Table 1, Mercer Compensation Study

Question:

a) Please confirm the following for 2017 and add explanatory notes
   i. Non-Represented Employee Compensation was at Market Median
   ii. Energy Professional Employee Compensation increased to 1.12 -12% premium to Market
   iii. Trades & Technical Employee Compensation decreased to 1.12 -12% premium to Market

b) Please update the benchmark to 2020 using the assumption that the peer group compensation has increased at inflation (CPI) and using Hydro One's actual compensation increases for 2018 and 2019. Discuss if the market premium has increased or decreased from 2017-2020 under this scenario.

c) With respect to the Controller position shown in Table B1 please provide the basis for this position at Hydro One being compensated at 20.3 % above the Median.

F-EP-22
Reference: Exhibit F Tab 4 Schedule 1 Attachment 3 Towers Watson Compensation Study

Question:

a) Please Confirm the following:
On average, the Sample group base salary is 9% and TRC 7% above Market Median
The Core Services group base salary is at 63% and TTC 64% above Market Median
(For the comparator group TTC includes incentive pay and for Hydro One the Share Grant Plan).

b) Please Provide the 2020 annual cost of the 64% Premium for Core Services Compensation?

c) Given the finding that Hydro One Core Services TTC is well above norm for both MCP and Society represented positions, what is Hydro One going to do about this situation?

F-EP-23
Reference: Exhibit F Tab 4, Schedule 1, Attachment 4, Team Scorecard

Question:

a) Why does the Team Scorecard only include T-SAIDI and not T-SAIFI and T-MAIFI?

b) Other than the Evolved TX scorecard where are T-SAIFI and T-MAIFI used in Hydro One Transmission Scorecards? Please provide examples

G-EP-24
Reference: Exhibit G, Tab 1, Schedule 1, Page 2

Question:

a) Please provide the Historic ROE for Hydro One Networks and the ROE for the Transmission Business.

b) Please provide a Table and a chart that shows for the Transmission Business, the Revenue Requirement and allowed and actual ROE for each of the 5 historic years.

c) Please discuss the reasons for any material over-earning

G-EP-25
Reference: Exhibit G, Tab 1, Schedule 2, Pages 4 and 5, Tables 2, 3 and 4

Question:

a) Please provide a version of Tables 2, 3 and 4 with columns added to show the original March 21 filing coupon rates and bond rates.

b) Please indicate/discuss with reference to the requested version of Table 4 why coupon rates for forecast debt issues have increased since March 2019.

c) What Coupon Rates for 2019 and 2020 LT debt issues did the Board Approve in EB-2018-0049?

d) Please compare and contrast the cost of LT debt issues using EB-2019-0082 March values and update values.

e) How much will the difference in coupon rates cost ratepayers over the term of the new Debt Issues?

G-EP-26
Reference: Exhibit G (updated), Tab 1, Schedule 1; Exhibit A, Tab 2, Schedule 1

Preamble:
At Exhibit G (updated), Tab 1, Schedule 1, p.1, the Application states that the purpose of this evidence is to summarize the method and cost of financing Hydro One Transmission's capital requirements for the rebasing year 2020.

The Application states that the applicant is Hydro One Networks Inc. (which it refers to as "Hydro One"), a subsidiary of Hydro One Limited (Exhibit A, Tab 2, Schedule 1, p.1). The Application refers to the transmission business of Hydro One as Hydro One Transmission, the latter not shown in Exhibit A, Tab 5, Schedule 1, p.1 of 1: Corporate Organization Charts.

At Exhibit G (updated), Tab 1, Schedule 1, p.1, the Application states that the deemed capital structure of Hydro One Transmission for rate-making purposes is 60% debt and 40% common equity of utility rate base . It also states that the Hydro One Transmission return on equity is 8.96% according to the Board's required approach (p.2).

Question:

a) Is it correct that Hydro One Transmission is not a subsidiary of Hydro One, but rather a division of Hydro One?

b) Please confirm/disconfirm that Hydro One acquires the debt issued by its subsidiaries and divisions or businesses other than Hydro One Transmission.

c) Does Hydro One have any subsidiaries or divisions or businesses other than Hydro One Transmission that will be affected by the Custom Incentive Rate-Setting ("IR") framework that is the subject of this Application? If so, please identify.

d) Please confirm/disconfirm that the long-term debt rate for Hydro One Transmission (i.e. 4.57% for 2020 to 2022) as stated in the Application at Exhibit G (updated), Tab 1, Schedule 1, p.3, is the same as the long-term debt rate for Hydro One for the same period (as shown at Schedule 4, p.6).

e) Please confirm whether or not all other debt rates specified for Hydro One Transmission in the Application are the same as those of Hydro One.

f) The Application states that the return on equity for Hydro One Transmission is 8.98% based on the cost of capital parameters issued by the Board on November 22, 2018, and is calculated according to the Board's approach in its 2009 report on the Cost of Capital for Ontario's Regulated Utilities (Exhibit G (updated), Tab 1, Schedule 1, p. 2). Please confirm/disconfirm that the return on equity for Hydro One Transmission is calculated solely by reference to the long-term debt of Hydro One. Does this indicate that that the cost of equity to Hydro One Transmission is the same as that of the applicant Hydro One? If not, how would the two equity costs differ?

G-EP-27
Reference: Exhibit G, Tab 1, Schedule 2

Preamble:
The Application states that "Hydro One Transmission is allocated a portion of the debt issued by Hydro One Networks Inc. to Hydro One Inc. Hydro One Networks issues debt to Hydro One Inc. to reflect the debt issues by Hydro One Inc. to third-party public debt investors. … Third-party public debt investors hold all of the long-term debt issued by Hydro One Inc. …" (p.1 of 8)

Question:

a) To simplify the above, it is correct that the issuer of the third-party debt that ultimately finances Hydro One Transmission is Hydro One Inc.?

b) How is Hydro One Transmission's allocated share of the debt issued by Hydro One determined? In particular, does that share of debt include only the borrowing requirements of Hydro One Transmission for its transmission business?

c) Is the yield-to-maturity on the Hydro One debt always identical to the yield-to-maturity on the corresponding debt that Hydro One Inc. subsequently issues to public investors, after taking into account any discount/premium, legal fees and other costs that Hydro One Inc. incurs?

d) In regard to embedded debt, the Application refers to the "effective cost rates" (p.3 of 8). Please clarify whether those effective cost rates are used to establish the cost of embedded debt for determining the cost of capital to Hydro One Transmission.

e) In regard to new debt, the Application refers to the issuance of $300 million of three-year notes in June 2018. Would Hydro One Inc. normally classify three-year fixed-rate notes as long-term debt?

f) The Application states that those three-year notes were part of an interest-rate swap to convert those notes into floating-rate, short-term debt. What is the cost of this debt issuance plus interest rate swap arrangement for rate-making purposes?

g) Does Hydro One Transmission issue any variable-rate debt to Hydro One? How is variable-rate debt treated in determining Hydro One Transmission cost of capital, and where does the Application discuss this treatment?

H-EP-28
Reference: Exhibit H, Tab 1, Schedule 1, Table 1

Question:
Please Confirm whether the totals in Updated Table 1 have changed. If so please provide the originals and explain the differences.

I1-EP-29
Reference: Exhibit I1, Tab 1, Schedule 2, Page 12; Exhibit I1, Tab 1, Schedule 3, Page 4, Table 2; Exhibit I2, Tab 4, Schedule 1, Page 2

Question:
a) In allocating NBV to Functions and then Pools are there any dedicated assets related to Exports? If so, please identify these in terms of NBV and how these are dealt with in accordance with Elenchus Report on cost allocation.

b) Are there OM&A costs related to the Export Function? If so, are these costs allocated/recovered in accordance with the Elenchus Report.

c) Does Export Revenue (second reference Table 2) recover all related Asset and operating costs? If there is a difference how is this addressed? Please discuss.

I2-EP-30
Reference: Exhibit I2, Tab 1, Schedule 1, Page 2, Table 1; Exhibit I2, Tab 2, Schedule 1, Table 1

Question:

a) Please indicate what changes occurred to forecast UTR Rates (first reference table 1) between March and June, and discuss the reasons for this.

b) Please indicate what changes occurred to forecast Charge Determinants (Second reference Table 1) between March and June, and discuss the reasons for this.

I2-EP-31

Reference: Exhibit I2, Tab 4, Schedule 1, Pages 3 and 4, Table 1 and Table 2

Preamble: The decrease in the calculated ETS rate as compared to the 2015 study primarily reflects a decrease in Hydro One's OM&A costs relative to what was proposed at the time the 2015 study was completed, and an increase in forecast exports (MWh)from what was assumed in the 2015 study.

Question:

a) Please provide more details on how changes in allocated OM&A costs affected the calculated ETS rate.

b) Have other allocated costs changed such as NBV of assets? Please provide more details.

c) Has the ETS rate fully recovered its allocated costs? Please provide the Revenue/Cost Ratios for historic years.